

CLAIMS:

1. A method of text improvement, the method comprising the steps of:
detecting (SW, Det) text in an image;
scaling (Scal) the image to adjust first numbers of pixels per line and lines per
image of the image to second numbers of pixels per line and lines per image that fit in with a
display (D) on which the image is to be displayed; and
processing (Post-proc) the image in dependence on a result of the text
detecting step.
2. A method as claimed in claim 1, wherein the detecting step (SW, Det)
comprises the step of setting a background color ($C_{\text{background}}$) to white, and a text color (C_{text}) to
black, and the processing step (Post-proc) comprises the step of setting white back to the
background color ($C_{\text{background}}$), and black back to the text color (C_{text}).
3. A method as claimed in claim 1, wherein the detecting step (SW, Det)
comprises the step of determining whether a text color is fewer present than a background
color.
4. A method as claimed in claim 1, wherein the detecting step (SW, Det)
comprises the step of determining (BlGr) a region for which it holds that the number of
colors does not exceed 2.
5. A method as claimed in claim 1, wherein the processing step (Post-proc)
comprises the step of subjecting a scaled image to a thresholding operation.
6. A method as claimed in claim 1, wherein the processing step (Post-proc)
comprises the step of subjecting a scaled image to a morphological filtering.

7. A device for text improvement, the device comprising:
means for detecting (SW, Det) text in an image;
means for scaling (Scal) the image to adjust first numbers of pixels per line
and lines per image of the image to second numbers of pixels per line and lines per image
5 that fit in with a display (D) on which the image is to be displayed; and
means for processing (Post-proc) the image in dependence on a result of the
text detecting means.

8. A display apparatus, comprising:
a device for text improvement as claimed in claim 7; and
a display (D).

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0.852.0.853.0.854.0.855.0.856.0.857.0.858.0.859.0.860.0.861.0.862.0.863.0.864.0.865.0.866.0.867.0.868.0.869.0.870.0.871.0.872.0.873.0.874.0.875.0.876.0.877.0.878.0.879.0.880.0.881.0.882.0.883.0.884.0.885.0.886.0.887.0.888.0.889.0.890.0.891.0.892.0.893.0.894.0.895.0.896.0.897.0.898.0.899.0.900.0.901.0.902.0.903.0.904.0.905.0.906.0.907.0.908.0.909.0.910.0.911.0.912.0.913.0.914.0.915.0.916.0.917.0.918.0.919.0.920.0.921.0.922.0.923.0.924.0.925.0.926.0.927.0.928.0.929.0.930.0.931.0.932.0.933.0.934.0.935.0.936.0.937.0.938.0.939.0.940.0.941.0.942.0.943.0.944.0.945.0.946.0.947.0.948.0.949.0.950.0.951.0.952.0.953.0.954.0.955.0.956.0.957.0.958.0.959.0.960.0.961.0.962.0.963.0.964.0.965.0.966.0.967.0.968.0.969.0.970.0.971.0.972.0.973.0.974.0.975.0.976.0.977.0.978.0.979.0.980.0.981.0.982.0.983.0.984.0.985.0.986.0.987.0.988.0.989.0.990.0.991.0.992.0.993.0.994.0.995.0.996.0.997.0.998.0.999.0.1000.0.1001.0.1002.0.1003.0.1004.0.1005.0.1006.0.1007.0.1008.0.1009.0.1010.0.1011.0.1012.0.1013.0.1014.0.1015.0.1016.0.1017.0.1018.0.1019.0.1020.0.1021.0.1022.0.1023.0.1024.0.1025.0.1026.0.1027.0.1028.0.1029.0.1030.0.1031.0.1032.0.1033.0.1034.0.1035.0.1036.0.1037.0.1038.0.1039.0.1040.0.1041.0.1042.0.1043.0.1044.0.1045.0.1046.0.1047.0.1048.0.1049.0.1050.0.1051.0.1052.0.1053.0.1054.0.1055.0.1056.0.1057.0.1058.0.1059.0.1060.0.1061.0.1062.0.1063.0.1064.0.1065.0.1066.0.1067.0.1068.0.1069.0.1070.0.1071.0.1072.0.1073.0.1074.0.1075.0.1076.0.1077.0.1078.0.1079.0.1080.0.1081.0.1082.0.1083.0.1084.0.1085.0.1086.0.1087.0.1088.0.1089.0.1090.0.1091.0.1092.0.1093.0.1094.0.1095.0.1096.0.1097.0.1098.0.1099.0.1100.0.1101.0.1102.0.1103.0.1104.0.1105.0.1106.0.1107.0.1108.0.1109.0.1110.0.1111.0.1112.0.1113.0.1114.0.1115.0.1116.0.1117.0.1118.0.1119.0.1120.0.1121.0.1122.0.1123.0.1124.0.1125.0.1126.0.1127.0.1128.0.1129.0.1130.0.1131.0.1132.0.1133.0.1134.0.1135.0.1136.0.1137.0.1138.0.1139.0.1140.0.1141.0.1142.0.1143.0.1144.0.1145.0.1146.0.1147.0.1148.0.1149.0.1150.0.1151.0.1152.0.1153.0.1154.0.1155.0.1156.0.1157.0.1158.0.1159.0.1160.0.1161.0.1162.0.1163.0.1164.0.1165.0.1166.0.1167.0.1168.0.1169.0.1170.0.1171.0.1172.0.1173.0.1174.0.1175.0.1176.0.1177.0.1178.0.1179.0.1180.0.1181.0.1182.0.1183.0.1184.0.1185.0.1186.0.1187.0.1188.0.1189.0.1190.0.1191.0.1192.0.1193.0.1194.0.1195.0.1196.0.1197.0.1198.0.1199.0.1200.0.1201.0.1202.0.1203.0.1204.0.1205.0.1206.0.1207.0.1208.0.1209.0.1210.0.1211.0.1212.0.1213.0.1214.0.1215.0.1216.0.1217.0.1218.0.1219.0.1220.0.1221.0.1222.0.1223.0.1224.0.1225.0.1226.0.1227.0.1228.0.1229.0.1230.0.1231.0.1232.0.1233.0.1234.0.1235.0.1236.0.1237.0.1238.0.1239.0.1240.0.1241.0.1242.0.1243.0.1244.0.1245.0.1246.0.1247.0.1248.0.1249.0.1250.0.1251.0.1252.0.1253.0.1254.0.1255.0.1256.0.1257.0.1258.0.1259.0.1260.0.1261.0.1262.0.1263.0.1264.0.1265.0.1266.0.1267.0.1268.0.1269.0.1270.0.1271.0.1272.0.1273.0.1274.0.1275.0.1276.0.1277.0.1278.0.1279.0.1280.0.1281.0.1282.0.1283.0.1284.0.1285.0.1286.0.1287.0.1288.0.1289.0.1290.0.1291.0.1292.0.1293.0.1294.0.1295.0.1296.0.1297.0.1298.0.1299.0.1300.0.1301.0.1302.0.1303.0.1304.0.1305.0.1306.0.1307.0.1308.0.1309.0.1310.0.1311.0.1312.0.1313.0.1314.0.1315.0.1316.0.1317.0.1318.0.1319.0.1320.0.1321.0.1322.0.1323.0.1324.0.1325.0.1326.0.1327.0.1328.0.1329.0.1330.0.1331.0.1332.0.1333.0.1334.0.1335.0.1336.0.1337.0.1338.0.1339.0.1340.0.1341.0.1342.0.1343.0.1344.0.1345.0.1346.0.1347.0.1348.0.1349.0.1350.0.1351.0.1352.0.1353.0.1354.0.1355.0.1356.0.1357.0.1358.0.1359.0.1360.0.1361.0.1362.0.1363.0.1364.0.1365.0.1366.0.1367.0.1368.0.1369.0.1370.0.1371.0.1372.0.1373.0.1374.0.1375.0.1376.0.1377.0.1378.0.1379.0.1380.0.1381.0.1382.0.1383.0.1384.0.1385.0.1386.0.1387.0.1388.0.1389.0.1390.0.1391.0.1392.0.1393.0.1394.0.1395.0.1396.0.1397.0.1398.0.1399.0.1400.0.1401.0.1402.0.1403.0.1404.0.1405.0.1406.0.1407.0.1408.0.1409.0.1410.0.1411.0.1412.0.1413.0.1414.0.1415.0.1416.0.1417.0.1418.0.1419.0.1420.0.1421.0.1422.0.1423.0.1424.0.1425.0.1426.0.1427.0.1428.0.1429.0.1430.0.1431.0.1432.0.1433.0.1434.0.1435.0.1436.0.1437.0.1438.0.1439.0.1440.0.1441.0.1442.0.1443.0.1444.0.1445.0.1446.0.1447.0.1448.0.1449.0.1450.0.1451.0.1452.0.1453.0.1454.0.1455.0.1456.0.1457.0.1458.0.1459.0.1460.0.1461.0.1462.0.1463.0.1464.0.1465.0.1466.0.1467.0.1468.0.1469.0.1470.0.1471.0.1472.0.1473.0.1474.0.1475.0.1476.0.1477.0.1478.0.1479.0.1480.0.1481.0.1482.0.1483.0.1484.0.1485.0.1486.0.1487.0.1488.0.1489.0.1490.0.1491.0.1492.0.1493.0.1494.0.1495.0.1496.0.1497.0.1498.0.1499.0.1500.0.1501.0.1502.0.1503.0.1504.0.1505.0.1506.0.1507.0.1508.0.1509.0.1510.0.1511.0.1512.0.1513.0.1514.0.1515.0.1516.0.1517.0.1518.0.1519.0.1520.0.1521.0.1522.0.1523.0.1524.0.1525.0.1526.0.1527.0.1528.0.1529.0.1530.0.1531.0.1532.0.1533.0.1534.0.1535.0.1536.0.1537.0.1538.0.1539.0.1540.0.1541.0.1542.0.1543.0.1544.0.1545.0.1546.0.1547.0.1548.0.1549.0.1550.0.1551.0.1552.0.1553.0.1554.0.1555.0.1556.0.1557.0.1558.0.1559.0.1560.0.1561.0.1562.0.1563.0.1564.0.1565.0.1566.0.1567.0.1568.0.1569.0.1570.0.1571.0.1572.0.1573.0.1574.0.1575.0.1576.0.1577.0.1578.0.1579.0.1580.0.1581.0.1582.0.1583.0.1584.0.1585.0.1586.0.1587.0.1588.0.1589.0.1590.0.1591.0.1592.0.1593.0.1594.0.1595.0.1596.0.1597.0.1598.0.1599.0.1600.0.1601.0.1602.0.1603.0.1604.0.1605.0.1606.0.1607.0.1608.0.1609.0.1610.0.1611.0.1612.0.1613.0.1614.0.1615.0.1616.0.1617.0.1618.0.1619.0.1620.0.1621.0.1622.0.1623.0.1624.0.1625.0.1626.0.1627.0.1628.0.1629.0.1630.0.1631.0.1632.0.1633.0.1634.0.1635.0.1636.0.1637.0.1638.0.1639.0.1640.0.1641.0.1642.0.1643.0.1644.0.1645.0.1646.0.1647.0.1648.0.1649.0.1650.0.1651.0.1652.0.1653.0.1654.0.1655.0.1656.0.1657.0.1658.0.1659.0.1660.0.1661.0.1662.0.1663.0.1664.0.1665.0.1666.0.1667.0.1668.0.1669.0.1670.0.1671.0.1672.0.1673.0.1674.0.1675.0.1676.0.1677.0.1678.0.1679.0.1680.0.1681.0.1682.0.1683.0.1684.0.1685.0.1686.0.1687.0.1688.0.1689.0.1690.0.1691.0.1692.0.1693.0.1694.0.1695.0.1696.0.1697.0.1698.0.1699.0.1700.0.1701.0.1702.0.1703.0.1704.0.1705.0.1706.0.1707.0.1708.0.1709.0.1710.0.1711.0.1712.0.1713.0.1714.0.1715.0.1716.0.1717.0.1718.0.1719.0.1720.0.1721.0.1722.0.1723.0.1724.0.1725.0.1726.0.1727.0.1728.0.1729.0.1730.0.1731.0.1732.0.1733.0.1734.0.1735.0.1736.0.1737.0.1738.0.1739.0.1740.0.1741.0.1742.0.1743.0.1744.0.1745.0.1746.0.1747.0.1748.0.1749.0.1750.0.1751.0.1752.0.1753.0.1754.0.1755.0.1756.0.1757.0.1758.0.1759.0.1760.0.1761.0.1762.0.1763.0.1764.0.1765.0.1766.0.1767.0.1768.0.1769.0.1770.0.1771.0.1772.0.1773.0.1774.0.1775.0.1776.0.1777.0.1778.0.1779.0.1780.0.1781.0.1782.0.1783.0.1784.0.1785.0.1786.0.1787.0.1788.0.1789.0.1790.0.1791.0.1792.0.1793.0.1794.0.1795.0.1796.0.1797.0.1798.0.1799.0.1800.0.1801.0.1802.0.1803.0.1804.0.1805.0.1806.0.1807.0.1808.0.1809.0.1810.0.1811.0.1812.0.1813.0.1814.0.1815.0.1816.0.1817.0.1818.0.1819.0.1820.0.1821.0.1822.0.1823.0.1824.0.1825.0.1826.0.1827.0.1828.0.1829.0.1830.0.1831.0.1832.0.1833.0.1834.0.1835.0.1836.0.1837.0.1838.0.1839.0.1840.0.1841.0.1842.0.1843.0.1844.0.1845.0.1846.0.1847.0.1848.0.1849.0.1850.0.1851.0.1852.0.1853.0.1854.0.1855.0.1856.0.1857.0.1858.0.1859.0.1860.0.1861.0.1862.0.1863.0.1864.0.1865.0.1866.0.1867.0.1868.0.1869.0.1870.0.1871.0.1872.0.1873.0.1874.0.18